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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/035,995	03/06/1998	TAKESHI SAITO	0039-6551-3R	5430
22850	7590	02/09/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			WILLETT, STEPHAN F	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/035,995

Applicant(s)

SAITO ET AL.

Examiner

Stephan F Willett

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20,24-29,37,38 and 93-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 24-29, 37-38, 93-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 20, 28, 29, 37, 38, and 93-95 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, “non-IP receiving node” is not enabled by the Applicant’s Specification.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 20, 28, 29, 37, 38, and 93-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The “non-IP receiving node” is unclear since it is not defined.
3. IP is/are acronym(s) and/or trademark(s), and thus are unclear.

Claim Rejections - 35 USC § 103

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 20, 24-27, 29, 37-38, 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. with Patent Number 5,623,605 in view of Boyle et al. with Patent Number 6,119,167.

7. Regarding claim(s) 20, 93-95, Keshav teaches an establishing unit to configure a connection in the LAN 333, col. 5, line 25 with non-IP hardware devices, col. 6, lines 31-39 and as evidenced by "identifies the destination of the ATM-formatted frame", col. 7, lines 66-67, and as "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29, and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection manager that a connection with the

Art Unit: 2141

requested remote server program has been established", col. 10, lines 49-53. Keshav teaches a second establishing unit to configure a connection between the WAN, col. 6, lines 31-39.

Keshav teaches a conversion unit to convert data formats, col. 12, lines 7-13, col. 13, lines 27-28 and "the ATM protocol stack interface may perform data transfer of ATM-formatted frames between application program and a device on the ATM network via the ATM network interface, or a device on the Internet protocol stack interface and the stack interfaces and the encapsulator-[encoder]-decapsulator may operate as a gateway processing system or ATM-enabled host on the Internet for transferring data between devices on the networks", col. 6, lines 49-58. Keshav teaches a commanding unit configured to command the transmitting node to transmit the information data through the first connection, by using a protocol of the LAN as "within the processing system, the exemplary application program, which may be a connection less server or client program, communicates with a connection service routines library and communications may occur by interprocess communication within the processing unit, or by a connection between two suitably programmed circuits or devices within the processing system", col. 5, lines 58-64 and col. 5-6, lines 66-4. The Keshav et al. patent does not explicitly disclose commanding a unit to receive data. In that Keshav operates to convert data formats, the artisan would have looked to the data conversion arts for details of implementing conversion between networks and connections established. In that art, Boyle, a related network data converter, teaches a "device 120 can perform the push, pull and caching operations on data received from multiple servers running different services", col. 6, lines 15-17 in order to provide the required data conversion. Boyle specifically teaches "when forming the GET request, the browser proxy ... which includes a user identification, for example, a telephone number of the cellar phone", col. 6, lines 44-48. It

Art Unit: 2141

would have been obvious to one of ordinary skill in the art to incorporate pushing data in the interfaced network in the Boyle patent since the system interface two different physical network systems similar to the protocol conversions in Keshav. To incorporate pushed data dependent on other protocols would insure that other data formats are supported by the system in an effective manner. The motivation for incorporating the pushing or commanding of data results in the ability to interface two different physical networks audio visual data. Therefore, by the above rational, the above claims are rejected.

8. Regarding claims 24, 38, the Keshav et al. patent discloses the apparatus of claim 20. The Keshav et al. patent does not explicitly disclose a collecting unit for collecting attribute information of transmitting and/or receiving nodes and a notifying unit for notifying said attribute information to said another data transfer control device and/or receiving node and a receiving unit for receiving a notice regarding attribute information of transmitting and/or receiving nodes; and a memory unit for storing said attribute information. However, Official Notice is taken (see MPEP 2144.03 (a)) that collecting information regarding network nodes and storing such network node attribute information is well known in the art to insure that two different networks are able to communicate. It would have been obvious to one of ordinary skill in the art at the time of the application's invention to determine the network topology to obtain the advantages of communicating with different network protocols and systems. By the above rational, claims 9 and 10 are rejected.

9. Regarding claim(s) 26-27, Keshav teaches a message designating an address to sent data, col. 6, lines 43-44.

10. Regarding claim(s) 29, 37, Keshav teaches encoding and decoding of data as "the

Art Unit: 2141

generated IP packet header is then appended [encoded] to the generated intermediate data packet to form the IP packet", col. 12, lines 43-44, "the ATM protocol stack interface arranges data into an ATM-formatted frame and transmits it to the encapsulator-decapsulator which encapsulates the data packet within an IP packet", col. 7, lines 49-53 and "if the IP format packet indicates the packet contains an encapsulated ATM-formatted frame, as in this example, then IP packet is sent to the encapsulator-decapsulator for decapsulation", col. 12, lines 54-58.

11. Claim 28-29, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. with Patent Number 5,623,605 in view of Ogawa et al. with Patent Number 5,608,874.

1. Regarding claim(s) 28, Keshav teaches an establishing unit to configure a connection in the LAN, col. 6, lines 12-15, and as "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29 and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection manager that a connection with the requested remote server program has been established", col. 10, lines 49-53. Keshav teaches a second establishing unit to configure a connection between the WAN, col. 6, lines 31-39. Keshav teaches a conversion unit to convert data formats, col. 12, lines 7-13, and col. 13, lines 27-28. Keshav teaches a commanding unit configured to command the transmitting node to transmit the information data through the first connection, by using a protocol of the LAN as "within the processing system, the exemplary application program, which may be a connection less server or client program, communicates with a connection service routines library and communications may occur by interprocess communication within the

Art Unit: 2141

processing unit, or by a connection between two suitably programmed circuits or devices within the processing system", col. 5, lines 58-64 and col. 5-6, lines 66-4. The Keshav et al. patent does not explicitly disclose transmitting audio/visual data and converting payload data. In that Keshav operates to convert data formats, the artisan would have looked to the data conversion arts for details of implementing conversion between networks and connection establishment. In that art, Ogawa, a related network data converter, teaches "a set of data that a Provider Section sends to Main Processing Section is called Provider Data File", col. 8, lines 51-53 in order to provide the required data content. Ogawa specifically teaches "once it has been determined which particular PreProcessor is needed to translate from the particular Provider Data Format of the Provider Data File", col. 15, lines 8-10. Further, Ogawa suggests "other known means for accomplishing file format translation", col. 16, line 38-39 can be accommodated to achieve differing formats. The motivation to incorporate payload data insures that expected data in a network system can be processed. Thus, it would have been obvious to one of ordinary skill in the art to incorporate payload data as taught in Ogawa into the network conversion system described in the Keshav patent because Keshav operates with network communications and Ogawa suggests that optimization can be obtained with audio visual data. Therefore, by the above rational, the above claim(s) are rejected.

12. Regarding claim(s) 29, 37, Ogawa teaches encoding and decoding of data, col. 6, lines 29-30.

13. Claims 20, 24-25, 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. with Patent Number 5,623,605 in view of Kremen et al. with Patent Number

Art Unit: 2141

5,706,434.

14. Regarding claim(s) 20, 93-95, Keshav teaches an establishing unit to configure a connection in the LAN, col. 6, lines 12-15, and as "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29 and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection manager that a connection with the requested remote server program has been established", col. 10, lines 49-53. Keshav teaches a second establishing unit to configure a connection between the WAN, col. 6, lines 31-39. Keshav teaches a conversion unit to convert data formats, col. 12, lines 7-13, and col. 13, lines 27-28. Keshav teaches a commanding unit configured to command the transmitting node to transmit the information data through the first connection, by using a protocol of the LAN as "within the processing system, the exemplary application program, which may be a connection less server or client program, communicates with a connection service routines library and communications may occur by interprocess communication within the processing unit, or by a connection between two suitably programmed circuits or devices within the processing system", col. 5, lines 58-64 and col. 5-6, lines 66-4. The Keshav et al. patent does not explicitly disclose transmitting audio/visual data. In that Keshav operates to convert data formats, the artisan would have looked to the data conversion arts for details of implementing conversion between networks and connection establishment. In that art, Kremen, a related network data converter, teaches "an object is defined herein as a collection of data", col. 6, line 48 in order to provide the required data content. Kremen specifically teaches "an object may be an image, audio, video, text or a document", col. 6, lines 49-51. Further,

Art Unit: 2141

Kremen suggests that “a plurality of protocols”, col. 6, line 67 can be accommodated. The motivation to incorporate audio visual data insures that expected data in a network system can be processed. Thus, it would have been obvious to one of ordinary skill in the art to incorporate audio visual data as taught in Kremen into the network conversion system described in the Keshav patent because Keshav operates with network communications and Kremen suggests that optimization can be obtained with audio visual data. Therefore, by the above rational, the above claim(s) are rejected.

2. Regarding claims 24, 38, Kremen teaches collecting attributes of nodes on a network, col. 7, lines 21-25. Kremen teaches notifying an intermediate node of sending nodes and receiving nodes attributes, col. 9, lines 27-30. Therefore, by the above rational, the above claim(s) are rejected.

3. Regarding claims 25, Kremen teaches storing said attribute information, col. 7, lines 25-27. Therefore, by the above rational, the above claim(s) are rejected.

Response to Amendment

4. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

5. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

6. Applicant suggests “Keshav mainly describes ... which are two global networks”, Paper Filed 4/28/04, Page 11, lines 7-9. The reference only is required to teach a LAN once, but the fact Keshav “mainly” involves two WANs, inherently includes at one LAN in the WAN and

Art Unit: 2141

obviously the teachings obviously apply to LANs also, i.e. LAN 333, col. 5, line 25 in Keshav.

Thus, Applicant's arguments can not be held as persuasive regarding patentability.

7. Applicant suggests "Keshav completely fails to disclose such a data transfer control device between the local home network", Paper Filed 4/28/04, Page 12, lines 7-8 repeatedly for each independent claim. Clearly, data is transferred to the LAN, col. 5, lines 23-25 that is a non-IP node in Keshav via control devices or "processing systems", col. 4, lines 52-53, or a "control manager", col. 7-8, lines 66-1. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

8. Applicant suggests "a communication path ... is also established", Paper Filed 4/28/04, Page 12, lines 13-14 and "reserving a communication path", Paper Filed 4/28/04, Page 13, line 23 and "receiving a control message indicating a connection", Paper Filed 4/28/04, Page 14, lines 14-15 are not taught. However, Keshav teaches "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29, and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection manager that a connection with the requested remote server program has been established", col. 10, lines 49-53. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

9. Applicant suggests "data are encoded or decoded before these data are transferred", Paper Filed 4/28/04, Page 12, line 25 and "a control message requesting encoding", Paper Filed 4/28/04, Page 13, lines 6-7 are not taught. However, Keshav teaches "the ATM protocol stack interface may perform data transfer of ATM-formatted frames between application program and

Art Unit: 2141

a device on the ATM network via the ATM network interface, or a device on the Internet protocol stack interface and the stack interfaces and the encapsulator[encoder]-decapsulator may operate as a gateway processing system or ATM-enabled host on the Internet for transferring data between devices on the networks", col. 6, lines 49-58. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

10. In an effort to further prosecution, all the above arguments, simply involve establishing communications over networks. The broadly claimed non-IP receiving node is simply an ATM node as taught by "identifies the destination of the ATM-formatted frame", col. 7, lines 66-67. However, Boyle was added to exemplify that there are many other non-IP nodes, see col. 5, lines 10-11 that use "link stations".

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the references is suggested. The other references cited teach numerous other ways to perform the commanding or pushing of data to non-IP nodes, thus a close review of them is suggested.

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

2. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2141

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

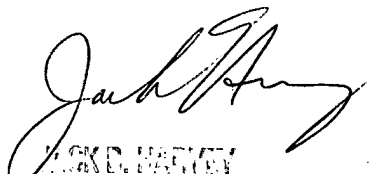
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (571) 272-3890. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

5. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

sfw

February 4, 2005



JACOB H. HARGIS
REGISTERED PROFESSIONAL EXAMINER